

Geology in Motion

Improving Geoscience
Education Through Creative
Use of Modern Technology



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Background

Problem 1

Geo-Education is static

- Geological Processes are often too slow to show with video
- Geological Processes are often too inaccessible to show with video

Problem 2

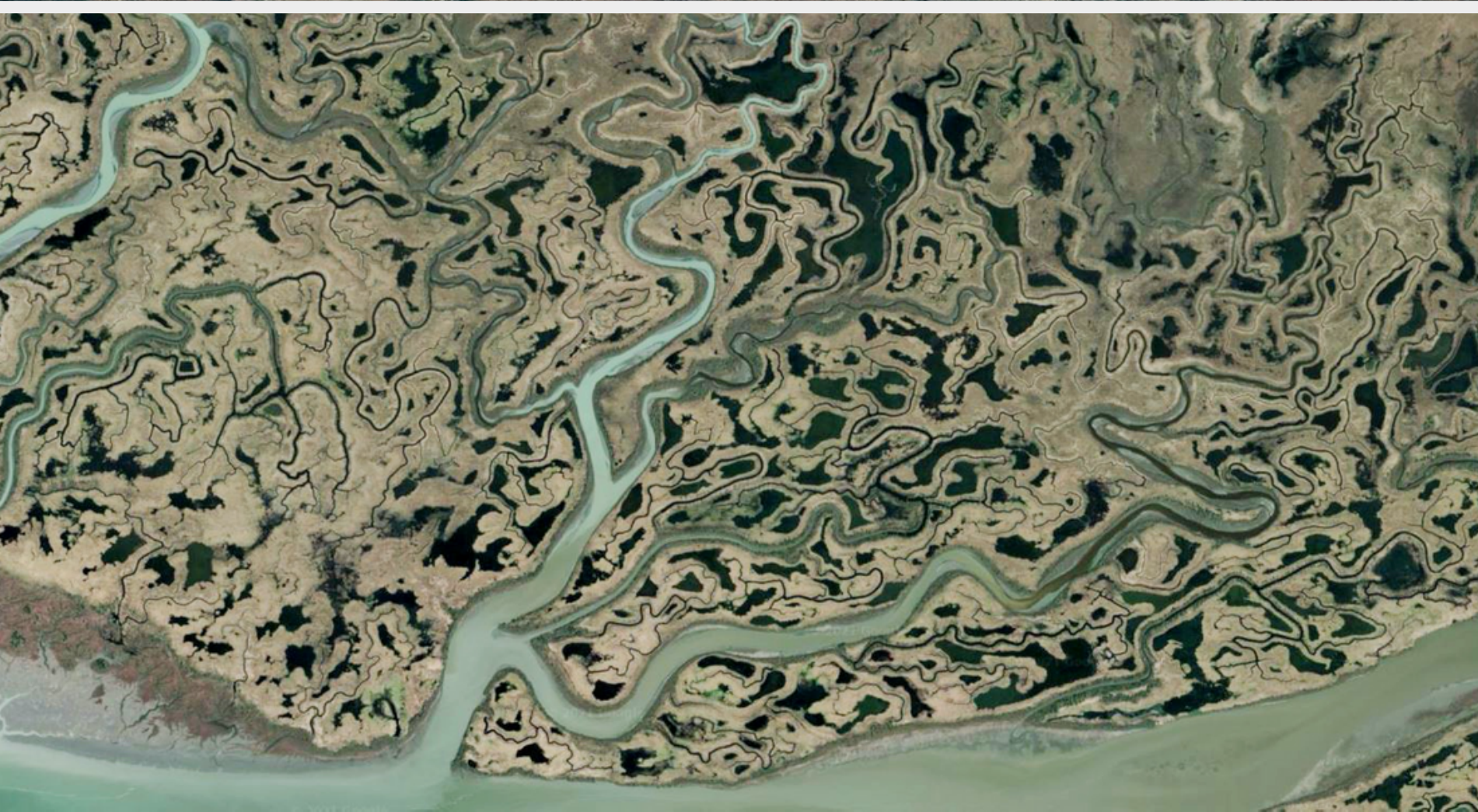
Community Outreach - People think Geology is lame

- Can we make the public better consumers and citizens through education?

Problem 3

Are Depositional Models Good?

- Can we scrutinize our depositional models?



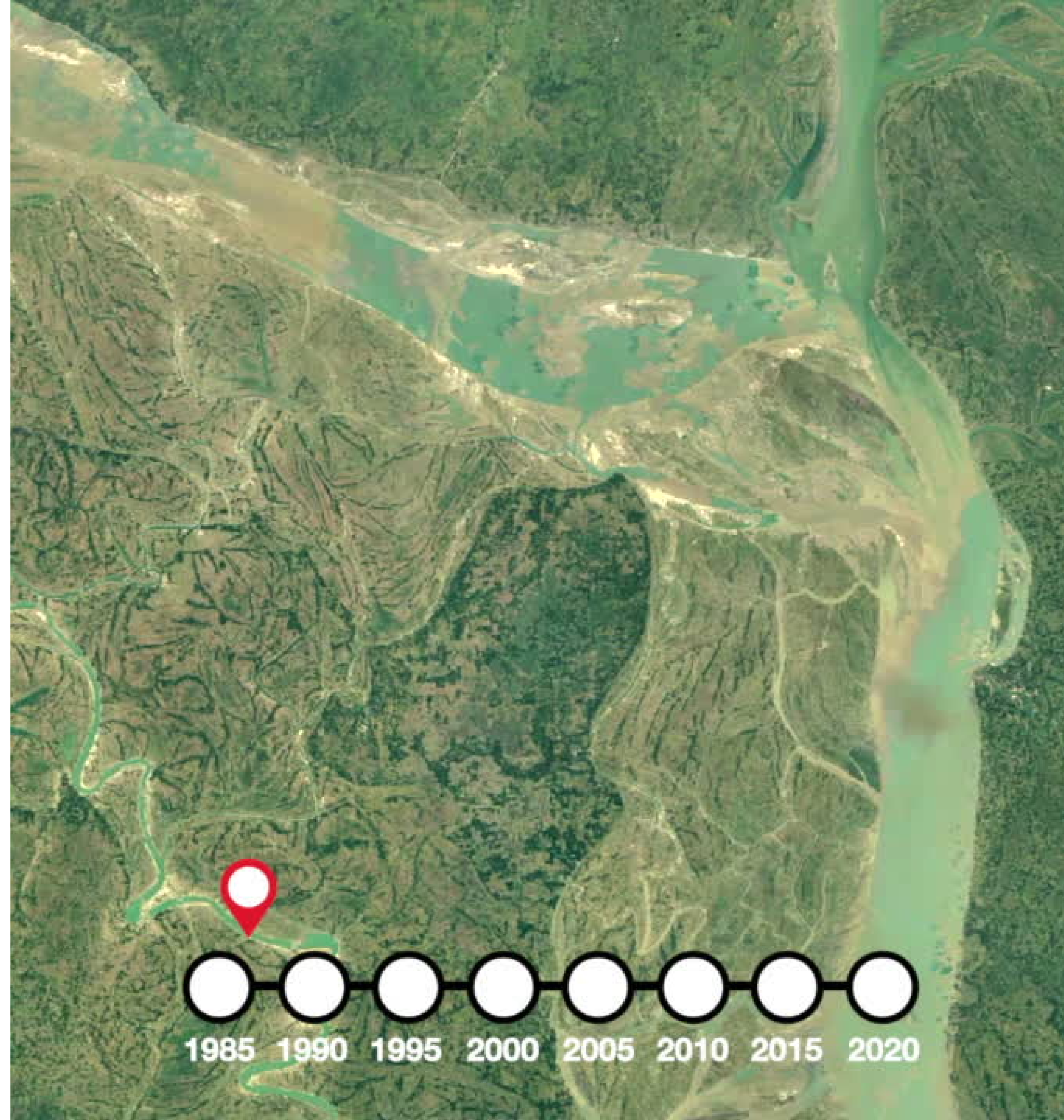
A satellite image of a river delta, likely the Nile Delta, showing a complex network of distributaries and oxbow lakes. The land is a mix of brown and green, indicating different vegetation and soil types. The river is a dark blue line winding through the landscape. A dark blue rectangular box is overlaid on the bottom left corner, containing white text.

Problem 1:

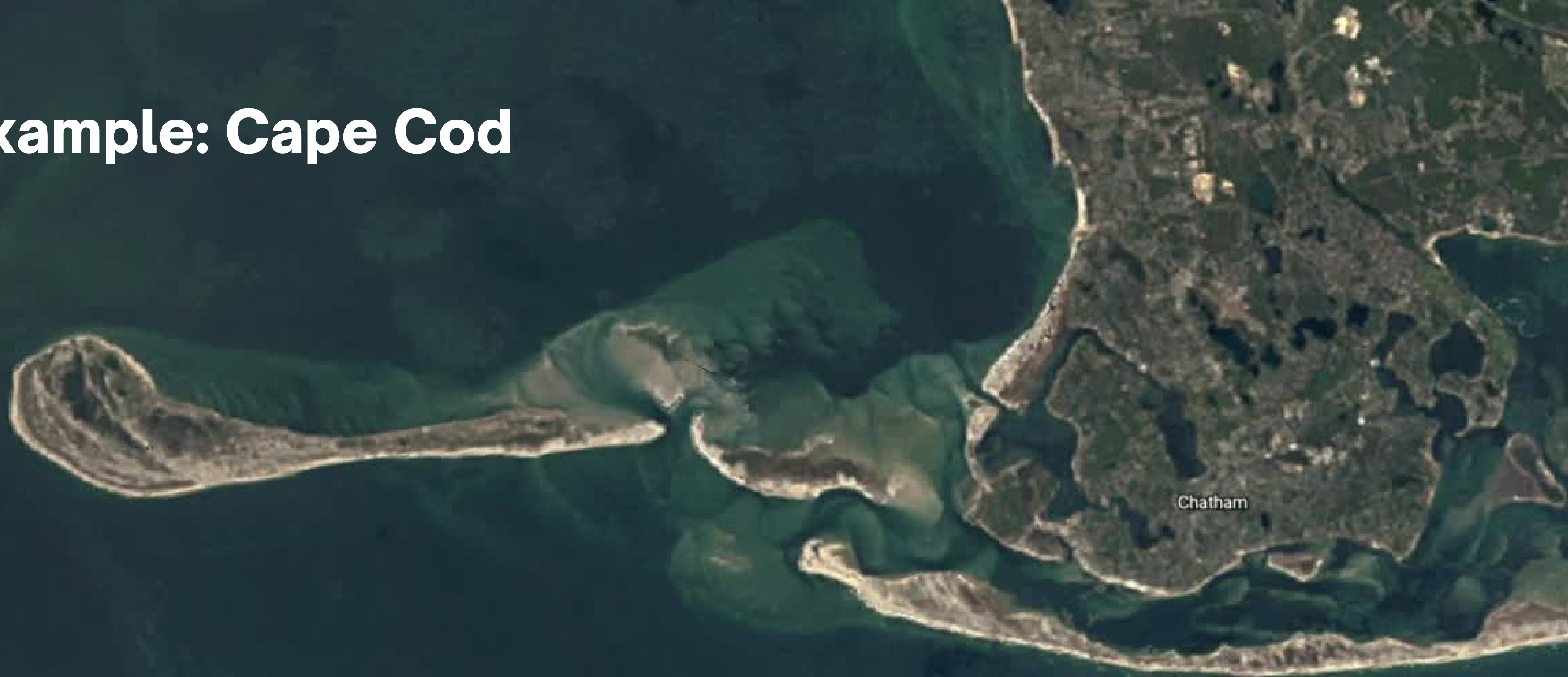
Geoscience Education

University Education

How much would university students benefit from better ways of visualizing complex systems and concepts?



Example: Cape Cod



Example: Lençóis Maranhenses, Brazil



Undergrad Education

We often make Geology as boring as possible for young students. Why?



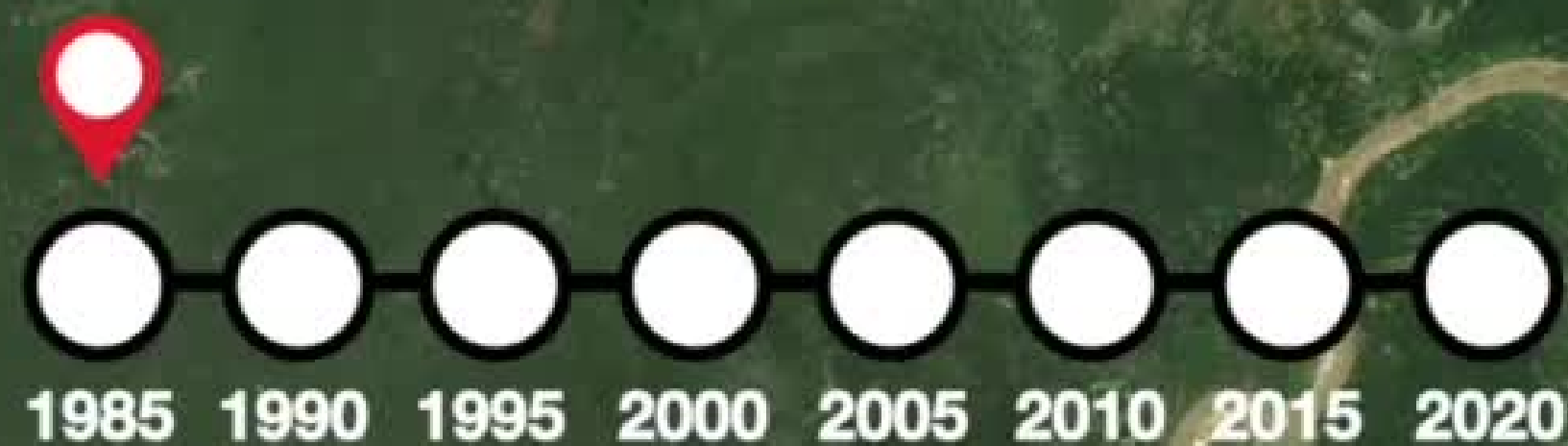
Improving Thinking Strategies

memorizing is boring. Mineral ID can be boring. Rock cycle can be boring. Especially in a virtual classroom. There is a better way.



Example Exercise

Have students internalize what a
meandering river looks like



Example Exercise

Have students examine how
dynamic shorelines can be



Caledonia

Example Exercise

Now can the students interpret what happened here to form this delta?



Problem 2:

Community Outreach

People see Geology as a boring science. In reality, everybody loves Geology. Let's help them see that.



People Want to Care About Geology

Tourism
6 Million
Visitors to
Grand
Canyon/yr



Energy
Politics,
economics,
climate



Water
Becoming
increasingly
important



Let's make it more accessible

CORO, VENEZUELA



1985 1990 1995 2000 2005 2010 2015 2020



Problem 3:

How Good are your Depositional Models?

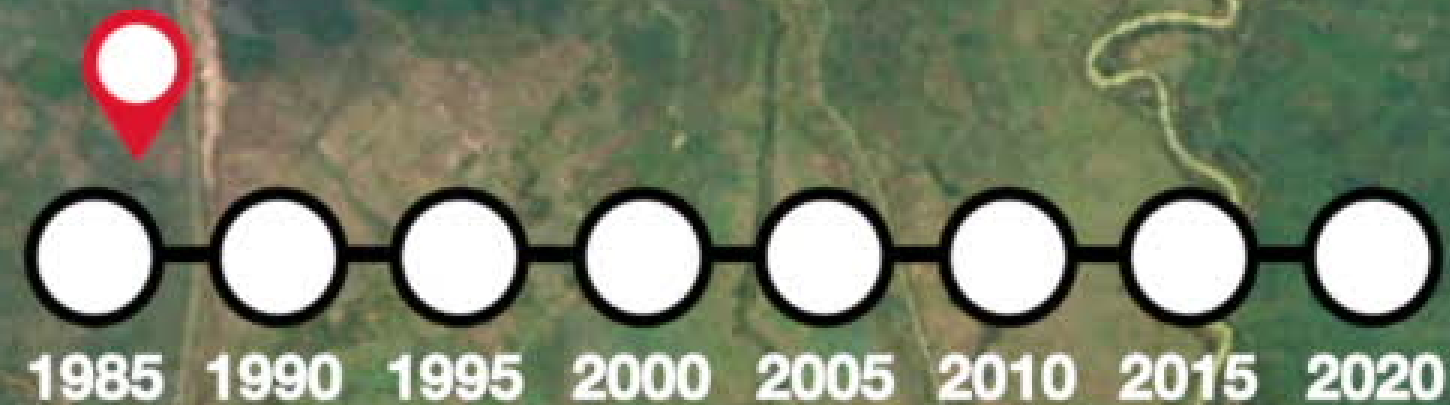
What can we learn by looking at all the data we have?



"There goes my depositional model"



**Can these videos change
how we view anthropogenic
influence on depositional
systems?**



We need your contribution!
What ideas do you have for
satellite locations, videos, or
other ways of bringing geology
to the public in better ways?

Let us know if you would like to
be involved in a YouTube video,
Linkedin post, or something
else to benefit the public.

